

Appl. No. 10/733,003
Response dated February 26, 2007
Reply to Office Action of December 5, 2006

REMARKS/ARGUMENTS

In response to the Examiner's Office Action of December 5, 2006, Applicants will now provide the following considerations and arguments.

Claims 1-2 and 11-19 have now been formally withdrawn which leaves claims 3 – 10 presently available for examination.

Now in regard to claims 4 and 6 it should be noted that the term "without" has been removed and a new phrase has been provided.

Additionally on claim 4, the phrase "OLE DB" has now been changed to read – Object Linking and Embedding Database".

In this Amendment, the prior claims 4 and 5 have now been included into a newly-amended claim 3.

Likewise the newly-amended claim 6 has now been combined with prior claims 7, 8, 9 and 10.

Rejection Under 35 U.S.C. § 101

In regard to Examiner's rejection on 35 U.S.C. 101 for indefiniteness on claims 7 – 9, these claims have been canceled and combined with claim 6. Thus, this should be sufficient indication that there is a useful tangible and concrete result which has a practical application.

In regard to Examiner's statements about "conditional limitations" in claims 7 and 8, it will be seen that these so-called conditional limitations have been removed and provided with more positive statement of action.

Likewise, in regard to former claim 9, any conditional limitations in the language have been removed and new statements provided.

Rejection Under 35 U.S.C. § 102

The Examiner has rejected the claims under 35 U.S.C. § 102 on the basis of the Tabbara reference U.S. Patent 6,460,043. Applicants would traverse the contention that Tabbara could teach or encompass the amended claims.

While Tabbara teaches a data management system holding a base table of information in the database which provides an index structure having index files where each index file has a key

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which points to a record in the base table, it should be remarked that Applicant's system is a specialized Clearpath Server Configuration which utilizes a Master Control Program (MCP) operating system which is specially devoted to the particular type of database organization (DMSII) as provided by the Unisys Corporation.

As indicated in column 12 lines 43 - 46 of Tabbara, the Tabbara references uses a DBMS system catalog which consists of table with columns and key information. A rather complex system is involved which involves physical table data of Fig. 12 including a table ID, the "catalog" that the table is in and the name of the table. Then Fig. 13 Tabbara illustrates the data kept for each catalog. The information includes a catalog ID and the name of the catalog. Fig. 14 shows information on the physical columns that belong to a table. For each column there is specified a unique column ID. As Tabbara states in Fig. 15 regarding the keys that exist in the physical catalog, the keys are used to define relationships within tables as well as to define uniqueness within a table.

This involves a rather complex organization which should be contrasted with the more simplified system of Applicant's whereby a database access request can be made from an index structure rather directly in order to access the information required.

There is nothing in Tabbara which suggest retrieving or fetching a "limited set" of columns from a table. There is nothing in Tabbara column 5 lines 60 - 67 and column 6 lines 1 - 3 to indicate the fetching of a "limited set" of columns from a table. Then again at Tabbara column 33 lines 65 - 67 and column lines 1 - 3, there is nothing to indicate any means for fetching a "limited set" of columns from a table.

It should be noted in Tabbara that he requires a "dictionary" of conceptual information and a "dictionary" of physical information about the data. The machine's readable requests to access the data is in the form related to a "conceptual organization of the data and is not specific to a physical organization of the data". Thus there is a need to reference the dictionary of the conceptual information about the data, then requests are written to a conceptual query language (CQL) which substantially uses terms belonging to or derived from a natural language CQL

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which includes terms in the classes of names and concepts. The name terms are used to describe the objects in the object-relational-model of the data.

In one example of Tabbara, he says data is organized in rows and the CQL (Conceptual Query Language) includes a select command that retrieves data in rows.

It should be noted that Applicant's system involves fetching a limited set of columns from the base table.

As indicated earlier in Applicant's Fig. 3 and Fig. 4 and Fig. 5, there is a much simpler sequence of operations in order to link a row which has a column item of information.

As will be noted in the newly-amended claims 3 and 6, there are involved a sequence of items and clauses some of which may be considered similar to the actions of Tabbara. However, a number of items of Applicant's functionality, (as seen in clauses (a1 - a3) of claim 6) --- makes it evident that no such particular configurative teaching is shown in the Tabbara reference.

Since this particular prosecution is limited to a portion of the originally-specified claims and since the Applicant's system applies to a specialized database configuration using a specialized server operating under a Master Control Program, it should be understood that this system is considerably different from and operates in a much more simpler matter than that of the Tabbara reference.

There is nothing in the Tabbara reference which shows the configuration of Applicant's Fig. 2 whereby a client application 100 operates through a data provider object 25 and transport object 26 through a TCB/I Network 22 and thence to and from a server library 28 and a worker 27 to communicate with the Enterprise Database Server 104 which has a Master Control Program platform.

For example, in Applicant's Fig. 4 if a rowset occurs with an index and there is NULL accessor (no bindings) then the rows can be fetched from the index. And thus information is rather succinctly provided.

Likewise in Applicant's Fig. 3, in order to open a rowset --- if the rowset is open with an index and when the Find Key is applicable, then there is a simple access of the CROWSET member (which is merely a Rowset in C++).

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This is a much simpler and more direct operation than the rather complex set up required in the Tabbara reference.

Regarding the Applicant's prior claim 3, clause (a), where Examiner cited Tabbara column 1, lines 25 – 40 (regarding "fetching a limited set of columns" --- these lines of Tabbara do not teach the fetching of a limited set of columns --- as is done by Applicant.

Then on Applicant's prior claim 3 clause (b), here Examiner cites Tabbara, column 39, lines 1 – 49. Note that Tabbara states --- CQE266 is responsible for accepting CQL query 61, generating the physical DML (e.g. SQL) and fetching and returning the final result sets.....CQE266.... it also allows the data returned to the Cache in its final conceptual rowset form which can improve performance. DLP270 acts essentially as a smart, efficient OLE DB command server, abstracting from its consumer, the CQE266, the physical location of the data pertaining to a given command ---.

This sequence of Tabbara refers to his Fig. 44 and is discussed in column 38 of Tabbara and involves a very complex sequence of events that of course would not only be time consuming but subject to all sorts of error possibilities.

In regard to Applicant's prior claim 4 clause (c), Examiner has cited column 1 lines 30 – 40. This section does mention the Microsoft OLE Database (OLE DB). However, this section does not mention accessing "selected columns" in an index structure.

Further on this prior claim 4, Examiner cites column 12 lines 1467 and column 13 lines 1 – 5. This statement of Tabbara involves the use of physical mapping that tells the DSL62 how to get to the physical schema from the conceptual schema....Here Fig. 11D specifies the E Physical Mapping Types. A column ID is provided where the map pertains to a Value Object, to define which column they use in the physical schema. A prime key... that is used for Entity Objects as a reference mode is provided where the mapping information is for an Entity. Then a series of other complicated rules and operations are involved here. Then finally Tabbara cites "physical information"... which is all the information pertaining to the physical model. This information is extracted from the DPMS system catalog and consists mostly of a Table, Column, and key information. This is followed by

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further complications on the use of a Table ID and the catalog, where Fig. 14 of Tabbara illustrates information on the physical columns that belong to the table.

Now in regard to Applicant's prior claim 6 the Examiner has cited various Tabbara sections regarding clause (a) of Applicants.

There is nothing in Tabbara column 1 lines 52 – 67 and column 2 lines 1 – 52 to indicate that a Client Query means is used for fetching a limited set of columns from a table. Further, there is nothing to indicate Applicant's clause (b) regarding---checking means to determine which columns are present in the index structure which spans the table.

Likewise, Examiner's citation of Tabbara column 5 lines 56 – 67 to column 6 lines 1 – 3---does not teach or indicate any checking means to determine which columns are present in the index structure nor any request means for fetching a column from only the index structure.

Then as indicated in the Applicant's amended claims, the prior claims of Applicant's claims 7, 8, 9 and 10 are now included within claim 6 and the conditional limitations involved have been removed.

Thus, all in all, in observing the complexity of the various operations required for the Tabbara operation, it should be more clearly seen that Applicant's configuration involved a more simplified and efficient operation --- in that Applicant has a very direct way of accessing a row and a column through the use of an index structure which will operate as long as there is no binding on the particular data involved.

Under these circumstances Applicants consider that they have provided a much more simpler and less complex sequence of operations in order to access data from a database and especially is focused on a database of Applicant's Database Management System (DMSII) which operates in conjunction with the Clearpath Server operating under a Master Control Program.

In view of the considerable differences in the database organization and operation in Applicant's system --- which is considerably different from that of the Tabbara reference and with a much considerably simplified sequence of operations for accessing columns present in

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index structures, --- (thus eliminating any need to access the base table), it should be understood that the presently-amended claims described a more efficient simplified system for accessing data from a database than that of the Tabbara reference, and Applicant's claims should be considered as a whole in their entirety.

Conclusion

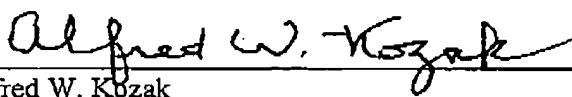
In this regard it is respectfully requested that Examiner provide a timely Notice of Allowance for the extant amended claims.

Respectfully submitted,

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Dated: February 26, 2007

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Carol A. Wasserman Date